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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/813,672

03/21/2001

Kathryn Ann McDonald

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27201

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07/29/2004

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EXAMINER

SHAAWAT, MUSSA

ART UNIT

PAPER NUMBER

2128

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/813,672	MCDONALD ET AL.	
	Examiner	Art Unit	
	Mussa A Shaawat	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed on March 21, 2001. Claims 1-7 are presented for examination.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: c7-c20. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: CZ and CW. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

Art Unit: 2128

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112 2nd paragraph due to lack of antecedent basis in the claims.

Claim 1 recites the limitation "the total number of user, the availability goal, and the user weight" in claim 1 limitation (a), "the number of servers per farm, the number of redundant servers per farm, the said availability goal" in claim 1 limitation (b), and "the minimum number of server farms, the optimum redundancy factor and the availability goal" in claim 1 limitation (c). There is insufficient antecedent basis for these limitations in the claim.

Claim 2 recites the limitation "the maximum number of users" in claim 2 limitation (b1). There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the number of redundant servers per farm, and the redundancy factor" in claim 3 limitation (b3), and "the estimated availability level" in claim 3 limitation (b4). There is insufficient antecedent basis for these limitations in the claim.

Claim 4 recites the limitation "the availability level goal, the number of server farms, and the number of servers per farm" in claim 4 limitation (b5). There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the redundancy factor" in claim 5 limitation (b5), "the redundancy factor" in claim 5 limitation (b6), and "the number of servers correlated, the number of users per farm, the estimated availability level, and the total number of servers in the Metafarm". There is insufficient antecedent basis for these limitations in the claim.

Claim 6 recites the limitation "the number of users involved, the availability goals and the user weights" in claim 6 limitation (a), "the number of servers" in claim 6 limitation (b), "the number of redundant servers" in claim 6 limitation (c), "the benchmark" in claim 6 limitation (d), "the number of servers per farm, and the benchmark value" in claim 6 limitation (e), "the said calculated availability level" in claim 6 limitation (f), "the number of output recommendations" in claim 6 limitation (j), "the redundancy factor" in claim 6 limitation (k), and "the number of users" in claim 6 limitation (l). There is insufficient antecedent basis for these limitations in the claim.

Claim 7 recites the limitation "the number of servers required to service" in claim 7 limitation (b), "the optimum number of servers, and the optimum number of redundant servers per farm" in claim 7 limitation (c), and "the redundancy factor" in claim 7 limitation (d). There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the

Art Unit: 2128

international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Blumenau et al. U.S. Patent No. (6,665,714) referred to hereinafter as Blumenau.

As per claim 1, Blumenau teaches a method for developing a Metafarm having an optimal number of Server Farms to provide recommended configurations meeting certain specified parameters, comprising the steps of:

(a) Delivering input data on the total number of users to be serviced, the Availability goal to be achieved, the User-Weight utilization factors involved, and the preferred Server types to be used, see Blumenau (col.6, lines 40-67).

(b) Sequencing a series of calculations to determine the number of Servers per Farm and the number of redundant Servers per Farm which match or exceed the said Availability goal, see Blumenau (col.6, lines 35-67, col.21, lines 45-60, and col.26, lines 1-20).

(c) Displaying a set of recommendations which show the minimum number of Server Farms which have the optimum redundancy factor and meet the values needed for the Availability goal, see Blumenau (col.17, lines 45-67, col.18, lines 1-25, col.25, lines 10-67, and col.30, lines 15-20).

As per claim 2, Blumenau teaches a method of claim 2 wherein step (b) includes the steps of:

(bl) retrieving a Benchmark parameter, which indicates the maximum number of users, which can be serviced by a chosen server, type; see Blumenau (col.2, lines 1-15, and col.30, lines 15-20).

Art Unit: 2128

(b2) calculating a preliminary number of such chosen Servers, which will constitute Server Farm, see Blumenau (col.33, lines 20-40).

As per claim 3, Blumenau teaches a method of claim 2 wherein step (b2) includes the steps of:

(b3) calculating the number of redundant Servers per Farm according to a preliminary set percentage parameter for the Redundancy Factor.

(b4) calculating the estimated Availability Level for the Server Farm chosen, see Blumenau (col.6, lines 35-67, col.21, lines 45-60, col.26, lines 1-20, and col.30 lines 50-67).

As per claim 4, Blumenau teaches a method of claim 3 which includes the steps of: (b5) if step (b4) Availability Level does not meet or exceed the Availability Level goal, then initiate a sequential loop by either incrementing or decrementing the number of Server Farms to re-calculate the number of Servers per Farm and number of redundant Servers per Farm which meet or exceed the Availability Level goal, see Blumenau (col.6, 1-41, and col.22, lines 1-30).

As per claim 5, Blumenau teaches a method of claim 3 which includes the steps of:

(b5) decrementing the Redundancy Factor until no acceptable recommendations are available, see Blumenau (col.25, lines 10-67 and col.26, lines 1-20).

(b6) incrementing the Redundancy Factor in steps of 1% to find the optimum Redundancy Factor, see Blumenau (col.25, lines 10-67 and col.26, lines 1-20).

(b7) storing configuration recommendations in an array indicating output displays of the number of Servers correlated to the number of Users per Farm with the

Art Unit: 2128

estimated Availability bevel, estimated yearly downtime, number of redundant Servers in the Metafarm and the total number of Servers in the Metafarm, see Blumenau (col.25, lines 10-67 and col.26, lines 1-20).

As per claim 6, Blumenau teaches a method for optimizing the number of Server Farms to provide the most efficient recommended configurations, which provide a desired Availability Level goal and Redundancy Factor, comprising the steps of:

- (a) Inputting of data to indicate the number of users involved, the Availability goals, the user-weight factors, and preferred server types, see Blumenau (col.6, lines 40-67).
- (b) Calculating the number of servers per Farm to be utilized, see Blumenau (col.6, lines 35-67, col.21, lines 45-60, and col.26, lines 1-20).
- (c) Calculating the number of redundant Servers to be placed in each server Farm, see Blumenau (col.6, lines 35-67, col.21, lines 45-60, and col.26, lines 1-20).
- (d) Using a benchmark to check if the number of Servers per Farm from steps (b) and (c) exceed the benchmark values for the Servers involved, see Blumenau (col.2, lines 1-15, and col.30, lines 15-20).
- (e) If step (d) indicates that the number of Servers per Farm does not exceed the benchmark value, then calculating the estimated Availability Level of the Server Farm, see Blumenau (col.2, lines 1-15, and col.30, lines 15-20).
- (f) Checking to see that the said calculated Availability Level meets or exceeds the Availability Level goal; see Blumenau (col.6, 1-41, and col.22, lines 1-30);
- (g) If the Availability Level goal is not met or exceeded, then incrementing the number of Server Farms by "1".

Art Unit: 2128

(h) Checking to see if the number of Server Farms is greater than 100 or not greater than 100, see Blumenau (col.6, lines 35-67, col.21, lines 45-60, and col.26, lines 1-20).

(i) If the number of Server Farms is less than 100, then requesting through steps (b), (c), (d), (e), (f), (g), and (h) until step (h) indicates that the number of Server Farms is greater than 100, see Blumenau (col.6, lines 35-67, col.21, lines 45-60, and col.26, lines 1-20).

(j) Checking to see that the number of output recommendations is greater than "0", see Blumenau (col.6, lines 35-67, col.21, lines 45-60, and col.26, lines 1-20).

(k) Decrementing the Redundancy Factor in steps of 5% until no acceptable recommendations are available, see Blumenau (col.6, lines 35-67, col.21, lines 45-60, and col.26, lines 1-20).

(1) Incrementing the Redundancy Factor in steps of 1% to develop a set of recommendations which minimize the number of Server Farms while still supporting the number of users required and still meeting the Availability Level goal, see Blumenau (col.6, lines 35-67, col.21, lines 45-60, and col.26, lines 1-20).

As per claim 7, Blumenau teaches a system for configuring a Metafarm consisting of multiple Server Farms, which provides the optimum size and Availability Level goals for a specified customer profile comprising:

(a) Customer profile data means stored in a customer database; see Blumenau (col.6, lines 40-67).

Art Unit: 2128

(b) Benchmark information means stored in a benchmark database indicating the number of Servers required to service a given number of users, see Blumenau (col.2, lines 1-15, and col.30, lines 15-20).

(c) Program means for calculating the optimum number of Servers per Farm and the optimum number of redundant Servers per Farm, see Blumenau (col.6, lines 35-67, col.21, lines 45-60, and col.26, lines 1-20).

(d) Loop sequencing means for configuring different number of Servers per Farm with different values of the Redundancy Factor to display parameters which meet or exceed a prescribed Availability Level goal, see Blumenau (col.6, 1-41, and col.22, lines 1-30).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Bixler et al. US Patent No. (6,212,559) automated configuration of internet-like computer network.
- Kennelly et al. US Patent No. (6,754,702) custom administrator views of management objects.
- Austin et al. US Patent No. (5,500,934) Display and control system for configuration and monitoring a complex system.

Art Unit: 2128

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mussa A Shaawat whose telephone number is (703) 605-1372. The examiner can normally be reached on Monday-Friday (8:30am to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean R Homere can be reached on (703) 308-6647. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mussa Shaawat
Patent Examiner
July 21, 2004



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